ABSTRACT

An apparatus and method for signal processing in a root-mean-square (RMS) meter. In representative embodiments, the root-mean-square (RMS) meter includes an RMS converter having a converter input and a converter output. The RMS converter converts a time varying signal applied to the converter input to a signal at the converter output. The value of the signal at the converter output is indicative of the RMS value of the applied signal. The signal at the converter output comprises a non-time varying component and a time varying component as determined by a time constant of the RMS converter. The RMS meter further includes an inverting amplifier having an inverter input and an inverter output. The converter output is connected to the inverter input. In addition, the RMS meter includes a switch having first, second, and central contacts. The converter output is connected to the first contact, and the inverter output is connected to the second contact. When the switch is in a first position, the first contact is connected to the central contact, and when the switch is in a second position, the second contact is connected to the central contact.